

1644 #6

Serial Number: 09/501,787

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

RECEIVED
JUL -9 2003
FBI LABORATORY

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

Application No.:

09/501787

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- ☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other: _____

Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216
For CRF Submission Help, call (703) 308-4212
For PatentIn software help, call (703) 308-6856

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE

RAW SEQUENCE LISTING DATE: 05/28/2000
 PATENT APPLICATION: US/09/501,787 TIME: 15:07:21

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\05262000\I501787.raw

```

3 <110> APPLICANT: INSTITUT PASTEUR
5 <120> TITLE OF INVENTION: HYBRID PROTEINS THAT MIGRATE RETROGRADELY AND
6     TRANSYNAPTICALLY INTO THE CNS
8 <130> FILE REFERENCE: B4001_AD/CAL
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/501,787
C--> 11 <141> CURRENT FILING DATE: 2000-02-11
13 <150> PRIOR APPLICATION NUMBER: 60/055,615
14 <151> PRIOR FILING DATE: 1997-08-14
16 <150> PRIOR APPLICATION NUMBER: 60/065,236
17 <151> PRIOR FILING DATE: 1997-11-13
19 <160> NUMBER OF SEQ ID NOS: 16
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 49
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
31 <220> FEATURE:
32 <221> NAME/KEY: misc_feature
33 <222> LOCATION: (1)..(49)
34 <223> OTHER INFORMATION: sequence used to generate PCR fragments
36 <400> SEQUENCE: 1
37 ccccccgggc caccatggtt ttttcaacac caattccatt ttcttattc           49
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 18
42 <212> TYPE: DNA
43 <213> ORGANISM: Artificial Sequence
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
48 <400> SEQUENCE: 2
49 ctaaaccagt aatttctg                                           18
52 <210> SEQ ID NO: 3
53 <211> LENGTH: 25
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
60 <400> SEQUENCE: 3
61 aattatggac tttaaaagat tccgc                                   25
64 <210> SEQ ID NO: 4
65 <211> LENGTH: 24
66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
72 <400> SEQUENCE: 4

```

RAW SEQUENCE LISTING DATE: 05/28/2000
 PATENT APPLICATION: US/09/501,787 TIME: 15:07:21

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\05262000\I501787.raw

```

73 ggcattataa cctactctta gaat                24
76 <210> SEQ ID NO: 5
77 <211> LENGTH: 27
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
84 <400> SEQUENCE: 5
85 aatgccttta ataactttga tagaaat                27
88 <210> SEQ ID NO: 6
89 <211> LENGTH: 41
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
96 <400> SEQUENCE: 6
97 ccccccgggc atatgtcatg aacatatcaa tctgtttaat c        41
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 24
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
108 <400> SEQUENCE: 7
109 ctgaatatcg acggtttcca tatg                24
112 <210> SEQ ID NO: 8
113 <211> LENGTH: 40
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
120 <400> SEQUENCE: 8
121 ggcagtcctcg agtctagacc atggcttttt gacaccagac        40
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 20
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
132 <400> SEQUENCE: 9
133 catgactggg gatccccagt                20
136 <210> SEQ ID NO: 10
137 <211> LENGTH: 24
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
144 <400> SEQUENCE: 10
145 tatgataaaa atgcattttt agga                24

```

RECEIVED
 JUN -9 2000
 TC 1600 MAIL ROOM

RAW SEQUENCE LISTING DATE: 05/28/2000
 PATENT APPLICATION: US/09/501,787 TIME: 15:07:21

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\05262000\I501787.raw

```

148 <210> SEQ ID NO: 11
149 <211> LENGTH: 37
150 <212> TYPE: DNA
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
156 <220> FEATURE:
157 <221> NAME/KEY: misc_feature
158 <222> LOCATION: (1)..(37)
159 <223> OTHER INFORMATION: sequence used to change NcoI into BamHI
160     restriction site
162 <400> SEQUENCE: 11
163 tggagtcgac gctagcagga tcatttgtcc atccttc                      37
166 <210> SEQ ID NO: 12
167 <211> LENGTH: 17
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
174 <400> SEQUENCE: 12
175 gatatcggcg cgccagc                                              17
178 <210> SEQ ID NO: 13
179 <211> LENGTH: 17
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
186 <400> SEQUENCE: 13
187 tggcgcgccg atatcgc                                              17
190 <210> SEQ ID NO: 14
191 <211> LENGTH: 14
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
198 <220> FEATURE:
199 <221> NAME/KEY: misc_feature
200 <222> LOCATION: (1)..(14)
201 <223> OTHER INFORMATION: sequence used to change XhoI into AscI restriction
202     site
204 <400> SEQUENCE: 14
205 tcgatggcgc gccca                                              14
208 <210> SEQ ID NO: 15
209 <211> LENGTH: 1600
210 <212> TYPE: DNA
211 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: Description of Artificial Sequence: cDNA
216 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 05/28/2000

PATENT APPLICATION: US/09/501,787

TIME: 15:07:21

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05262000\I501787.raw

217	<221>	NAME/KEY:	CDS
218	<222>	LOCATION:	(88)..(1476)
220	<220>	FEATURE:	
221	<221>	NAME/KEY:	misc_feature
222	<222>	LOCATION:	(1)..(1600)
223	<223>	OTHER INFORMATION:	sequence isolated from a Clostridium Tetani strain
224			using PCR
226	<400>	SEQUENCE:	15
227	ggaacagct atgaccatga ttacgccaaag ctcgaaatta accctcacta aagggaacaa	60	
229	aagctggagc tcggtaccgc ggccacc atg gtt ttt tca aca cca att cca ttt	114	
230		Met Val Phe Ser Thr Pro Ile Pro Phe	
231		1 . 5	
233	tct tat tct aaa aat ctg gat tgt tgg gtt gat aat gaa gaa gat ata	162	
234	Ser Tyr Ser Lys Asn Leu Asp Cys Trp Val Asp Asn Glu Glu Asp Ile		
235	10 15 20 25		
237	gat gtt ata tta aaa aag agt aca att tta aat tta gat att aat aat	210	
238	Asp Val Ile Leu Lys Lys Ser Thr Ile Leu Asn Leu Asp Ile Asn Asn		
239		30 35 40	
241	gat att ata tca gat ata tct ggg ttt aat tca tct gta ata aca tat	258	
242	Asp Ile Ile Ser Asp Ile Ser Gly Phe Asn Ser Ser Val Ile Thr Tyr		
243		45 50 55	
245	cca gat gct caa ttg gtg ccc gga ata aat ggc aaa gca ata cat tta	306	
246	Pro Asp Ala Gln Leu Val Pro Gly Ile Asn Gly Lys Ala Ile His Leu		
247		60 65 70	
249	gta aac aat gaa tct tct gaa gtt ata gtg cat aaa gct atg gat att	354	
250	Val Asn Asn Glu Ser Ser Glu Val Ile Val His Lys Ala Met Asp Ile		
251		75 80 85	
253	gaa tat aat gat atg ttt aat aat ttt acc gtt agc ttt tgg ttg agg	402	
254	Glu Tyr Asn Asp Met Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg		
255	90 95 100 105		
257	gtt cct aaa gta tct gct agt cat tta gaa caa tat ggc aca aat gag	450	
258	Val Pro Lys Val Ser Ala Ser His Leu Glu Gln Tyr Gly Thr Asn Glu		
259		110 115 120	
261	tat tca ata att agc tct atg aaa aaa cat agt cta tca ata gga tct	498	
262	Tyr Ser Ile Ile Ser Ser Met Lys Lys His Ser Leu Ser Ile Gly Ser		
263		125 130 135	
265	ggt tgg agt gta tca ctt aaa ggt aat aac tta ata tgg act tta aaa	546	
266	Gly Trp Ser Val Ser Leu Lys Gly Asn Asn Leu Ile Trp Thr Leu Lys		
267		140 145 150	
269	gat tcc gcg gga gaa gtt aga caa ata act ttt agg gat tta cct gat	594	
270	Asp Ser Ala Gly Glu Val Arg Gln Ile Thr Phe Arg Asp Leu Pro Asp		
271		155 160 165	
273	aaa ttt aat gct tat tta gca aat aaa tgg gtt ttt ata act att act	642	
274	Lys Phe Asn Ala Tyr Leu Ala Asn Lys Trp Val Phe Ile Thr Ile Thr		
275	170 175 180 185		
277	aat gat aga tta tct tct gct aat ttg tat ata aat gga gta ctt atg	690	
278	Asn Asp Arg Leu Ser Ser Ala Asn Leu Tyr Ile Asn Gly Val Leu Met		
279		190 195 200	
281	gga agt qca gaa att act ggt tta gga gct att aga gag gat aat aat	738	

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/501,787
 DATE: 05/28/2000
 TIME: 15:07:21

Input Set : A:\Pto.amc
 Output Set: N:\CRF3\05262000\I501787.raw

```

282 Gly Ser Ala Glu Ile Thr Gly Leu Gly Ala Ile Arg Glu Asp Asn Asn
283          205          210          215
285 ata aca tta aaa cta gat aga tgt aat aat aat caa tac gtt tct 786
286 Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Asn Asn Gln Tyr Val Ser
287          220          225          230
290 att gat aaa ttt agg ata ttt tgc aaa gca tta aat cca aaa gag att 834
291 Ile Asp Lys Phe Arg Ile Phe Cys Lys Ala Leu Asn Pro Lys Glu Ile
292          235          240          245
294 gaa aaa tta tac aca agt tat tta tct ata acc ttt tta aga gac ttc 882
295 Glu Lys Leu Tyr Thr Ser Tyr Leu Ser Ile Thr Phe Leu Arg Asp Phe
296          250          255          260          265
298 tgg gga aac cct tta cga tat gat aca gaa tat tat tta ata cca gta 930
299 Trp Gly Asn Pro Leu Arg Tyr Asp Thr Glu Tyr Tyr Leu Ile Pro Val
300          270          275          280
302 gct tct agt tct aaa gat gtt caa ttg aaa aat ata aca gat tat atg 978
303 Ala Ser Ser Ser Lys Asp Val Gln Leu Lys Asn Ile Thr Asp Tyr Met
304          285          290          295
306 tat ttg aca aat gcg cca tcg tat act aac gga aaa ttg aat ata tat 1026
307 Tyr Arg Arg Thr Asn Ala Pro Ser Tyr Thr Asn Gly Lys Leu Asn Ile Tyr
308          300          305          310
310 tat aga agg tta tat aat gga cta aaa ttt att ata aaa aga tat aca 1074
311 Tyr Arg Arg Leu Tyr Asn Gly Leu Lys Phe Ile Ile Lys Arg Tyr Thr
312          315          320          325
314 cct aat aat gaa ata gat tct ttt gtt aaa tca ggt gat ttt att aaa 1122
315 Pro Asn Asn Glu Ile Asp Ser Phe Val Lys Ser Gly Asp Phe Ile Lys
316          330          335          340          345
318 tta tat gta tca tat aac aat aat gag cac att gta ggt tat ccg aaa 1170
319 Leu Tyr Val Ser Tyr Asn Asn Asn Glu His Ile Val Gly Tyr Pro Lys
320          350          355          360
322 gat gga aat gcc ttt aat aat ctt gat aga att cta aga gta ggt tat 1218
323 Asp Gly Asn Ala Phe Asn Asn Leu Asp Arg Ile Leu Arg Val Gly Tyr
324          365          370          375
326 aat gcc cca ggt atc cct ctt tat aaa aaa atg gaa gca gta aaa ttg 1266
327 Asn Ala Pro Gly Ile Pro Leu Tyr Lys Lys Met Glu Ala Val Lys Leu
328          380          385          390
330 cgt gat tta aaa acc tat tct gta caa ctt aaa tta tat gat gat aaa 1314
331 Arg Asp Leu Lys Thr Tyr Ser Val Gln Leu Lys Leu Tyr Asp Asp Lys
332          395          400          405
334 aat gca tct tta gga cta gta ggt acc cat aat ggt caa ata ggc aac 1362
335 Asn Ala Ser Leu Gly Leu Val Gly Thr His Asn Gly Gln Ile Gly Asn
336          410          415          420          425
338 gat cca aat agg gat ata tta att gca agc aac tgg tac ttt aat cat 1410
339 Asp Pro Asn Arg Asp Ile Leu Ile Ala Ser Asn Trp Tyr Phe Asn His
340          430          435          440
342 tta aaa gat aaa att tta gga tgt gat tgg tac ttt gta cct aca gat 1458
343 Leu Lys Asp Lys Ile Leu Gly Cys Asp Trp Tyr Phe Val Pro Thr Asp
344          445          450          455
347 gag gga tgg aca aat gat taaacagatt gatattgttca tgacatatgc 1506
348 Glu Gly Trp Thr Asn Asp

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/501,787

DATE: 05/28/2000

TIME: 15:07:22

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05262000\I501787.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:362 M:258 W: Mandatory Feature missing, <220> FEATURE:

R. Hayes

1644

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/501,787

DATE: 05/18/2000
TIME: 14:43:12

Input Set : A:\B4001_al.app
Output Set: N:\CRF3\05182000\I501787.raw

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: INSTITUT PASTEUR
5 <120> TITLE OF INVENTION: HYBRID PROTEINS THAT MIGRATE RETROGRADELY AND
6 TRANSYNAPTICALLY INTO THE CNS
8 <130> FILE REFERENCE: B4001_AD/CAL
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/501,787
C--> 11 <141> CURRENT FILING DATE: 2000-02-11
13 <150> PRIOR APPLICATION NUMBER: 60/055,615
14 <151> PRIOR FILING DATE: 1997-08-14
16 <150> PRIOR APPLICATION NUMBER: 60/065,236
17 <151> PRIOR FILING DATE: 1997-11-13
19 <160> NUMBER OF SEQ ID NOS: 16
21 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

356 <210> SEQ ID NO: 16
357 <211> LENGTH: 463
358 <212> TYPE: PRT
359 <213> ORGANISM: Artificial Sequence
360 <223> OTHER INFORMATION: Description of Artificial Sequence: cDNA
W--> 362 <220> FEATURE:
362 <400> SEQUENCE: 16
363 Met Val Phe Ser Thr Pro Ile Pro Phe
364 1 5
366 Ser Tyr Ser Lys Asn Leu Asp Cys Trp Val Asp Asn Glu Glu Asp Ile
367 10 15 20 25
369 Asp Val Ile Leu Lys Lys Ser Thr Ile Leu Asn Leu Asp Ile Asn Asn
370 30 35 40
372 Asp Ile Ile Ser Asp Ile Ser Gly Phe Asn Ser Ser Val Ile Thr Tyr
373 45 50 55
375 Pro Asp Ala Gln Leu Val Pro Gly Ile Asn Gly Lys Ala Ile His Leu
376 60 65 70
378 Val Asn Asn Glu Ser Ser Glu Val Ile Val His Lys Ala Met Asp Ile
379 75 80 85
381 Glu Tyr Asn Asp Met Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg
382 90 95 100 105
384 Val Pro Lys Val Ser Ala Ser His Leu Glu Gln Tyr Gly Thr Asn Glu
385 110 115 120
387 Tyr Ser Ile Ile Ser Ser Met Lys Lys His Ser Leu Ser Ile Gly Ser
388 125 130 135
390 Gly Trp Ser Val Ser Leu Lys Gly Asn Asn Leu Ile Trp Thr Leu Lys
391 140 145 150
393 Asp Ser Ala Gly Glu Val Arg Gln Ile Thr Phe Arg Asp Leu Pro Asp
394 155 160 165
396 Lys Phe Asn Ala Tyr Leu Ala Asn Lys Trp Val Phe Ile Thr Ile Thr
397 170 175 180 185

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/501,787

DATE: 05/18/2000
 TIME: 14:43:12

Input Set : A:\B4001_al.app
 Output Set: N:\CRF3\05182000\I501787.raw

```

399 Asn Asp Arg Leu Ser Ser Ala Asn Leu Tyr Ile Asn Gly Val Leu Met
400      190      195      200
402 Gly Ser Ala Glu Ile Thr Gly Leu Gly Ala Ile Arg Glu Asp Asn Asn
403      205      210      215
405 Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Asn Asn Gln Tyr Val Ser
406      220      225      230
408 Ile Asp Lys Phe Arg Ile Phe Cys Lys Ala Leu Asn Pro Lys Glu Ile
409      235      240      245
411 Glu Lys Leu Tyr Thr Ser Tyr Leu Ser Ile Thr Phe Leu Arg Asp Phe
412 250      255      260      265
414 Trp Gly Asn Pro Leu Arg Tyr Asp Thr Glu Tyr Tyr Leu Ile Pro Val
415      270      275      280
417 Ala Ser Ser Ser Lys Asp Val Gln Leu Lys Asn Ile Thr Asp Tyr Met
418      285      290      295
420 Tyr Leu Thr Asn Ala Pro Ser Tyr Thr Asn Gly Lys Leu Asn Ile Tyr
421      300      305      310
423 Tyr Arg Arg Leu Tyr Asn Gly Leu Lys Phe Ile Ile Lys Arg Tyr Thr
424      315      320      325
426 Pro Asn Asn Glu Ile Asp Ser Phe Val Lys Ser Gly Asp Phe Ile Lys
427 330      335      340      345
429 Leu Tyr Val Ser Tyr Asn Asn Asn Glu His Ile Val Gly Tyr Pro Lys
430      350      355      360
432 Asp Gly Asn Ala Phe Asn Asn Leu Asp Arg Ile Leu Arg Val Gly Tyr
433      365      370      375
435 Asn Ala Pro Gly Ile Pro Leu Tyr Lys Lys Met Glu Ala Val Lys Leu
436      380      385      390
438 Arg Asp Leu Lys Thr Tyr Ser Val Gln Leu Lys Leu Tyr Asp Asp Lys
439      395      400      405
441 Asn Ala Ser Leu Gly Leu Val Gly Thr His Asn Gly Gln Ile Gly Asn
442 410      415      420      425
444 Asp Pro Asn Arg Asp Ile Leu Ile Ala Ser Asn Trp Tyr Phe Asn His
445      430      435      440
447 Leu Lys Asp Lys Ile Leu Gly Cys Asp Trp Tyr Phe Val Pro Thr Asp
448      445      450      455
450 Glu Gly Trp Thr Asn Asp
451      460
E--> 458 8

```

VERIFICATION SUMMARY DATE: 05/18/2000
PATENT APPLICATION: US/09/501,787 TIME: 14:43:13

Input Set : A:\B4001_al.app
Output Set: N:\CRF3\05182000\I501787.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:362 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:458 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16